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(FILE 'HOME' ENTERED AT 20:55:38 ON 19 MAY 2000)

FILE 'MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 20:56:03
ON 19 MAY 2000

L1 12136 S SPA OR SCINTILLATION PROXIMITY ASSAY
L2 12136 S SPA OR (SCINTILLATION PROXIMITY ASSAY)
L3 0 S L2 (P) CHARGE CHARGE
L4 0 S L2 (P) CHARGE-CHARGE
L5 3 S L2 (P) (CHARG? (3A) INTERACT?)
L6 1 DUP REM L5 (2 DUPLICATES REMOVED)
L7 22 S L2 (P) ELECTROSTATIC
L8 14 DUP REM L7 (8 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 21:00:23 ON 19 MAY 2000
L9 0 S SCINTILLATION PROXIMITY ASSAY

FILE 'MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 21:01:28
ON 19 MAY 2000

L10 748 S SCINTILLATION PROXIMITY ASSAY
L11 6 S L10 (P) CHARG?
L12 3 DUP REM L11 (3 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 21:02:27 ON 19 MAY 2000

FILE 'MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 21:03:18
ON 19 MAY 2000

L13 22 S L10 (P) (POSITIVE OR NEGATIVE)
L14 28 S L10 (P) (POSITIV? OR NEGATIV? OR CATIO? OR ANIO?)
L15 16 DUP REM L14 (12 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 21:05:30 ON 19 MAY 2000

FILE 'STNGUIDE' ENTERED AT 21:05:52 ON 19 MAY 2000

FILE 'MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 21:09:49
ON 19 MAY 2000

L16 0 S L10 (P) ADSORB?
L17 20 S L10 AND ADSORB?
L18 20 DUP REM L17 (0 DUPLICATES REMOVED)
E BROPHY G?/IN
L19 4 S E4-E6
E BROPHY G?/IN, AU
L20 25 S E4-14
L21 23 DUP REM L20 (2 DUPLICATES REMOVED)
L22 4 S L21 AND L10
L23 181 S L10 AND KINASE
L24 81 S L10 (P) KINASE
L25 46 S L24 NOT STREPTAVIDIN
L26 26 DUP REM L25 (20 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 21:26:14 ON 19 MAY 2000

FILE 'MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 21:26:36
ON 19 MAY 2000

FILE 'STNGUIDE' ENTERED AT 21:26:37 ON 19 MAY 2000

FILE 'MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 21:27:13 ON 19 MAY 2000

FILE 'STNGUIDE' ENTERED AT 21:27:13 ON 19 MAY 2000

FILE 'STNGUIDE' ENTERED AT 21:27:19 ON 19 MAY 2000

FILE 'STNGUIDE' ENTERED AT 21:32:11 ON 19 MAY 2000
L27 0 S L10 (P) DERIVAT?

FILE 'MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 21:34:41 ON 19 MAY 2000
L28 19 S L10 (P) DERIVAT?
L29 0 S L10 (P) (DERIVAT? (6A) SURFAC?)
L30 11 DUP REM L28 (8 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 21:37:34 ON 19 MAY 2000
L31 0 S L10 AND ELECTROSTATIC

FILE 'MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 21:43:07 ON 19 MAY 2000
L32 3 S L10 AND ELECTROSTATIC
L33 3 DUP REM L32 (0 DUPLICATES REMOVED)

FILE 'MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 21:47:15 ON 19 MAY 2000
L34 735 S KINASE (P) SOLID (P) PHOSPHORYL?
L35 2 S L34 AND L10
L36 2 S L34 AND ELECTROSTATIC
L37 303 S OCTADECYL SULFATE
L38 0 S L37 AND L10
L39 33 S L10 AND CHARGED
L40 2 S L10 AND POLYANIO?
L41 7 S L10 AND POLYLYS?
L42 7 DUP REM L41 (0 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 21:58:08 ON 19 MAY 2000

FILE 'MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 22:02:25 ON 19 MAY 2000
L43 6 S L10 AND (SURFACE (6A) ADSORB?)
L44 6 DUP REM L43 (0 DUPLICATES REMOVED)
L45 3885 S PEPTIDE (P) ELECTROSTATIC
L46 1309 S L45 (P) (SOLID OR SURFACE OR BEAD OR WELL)
L47 593 S L46 (P) (ASSAY OR MEASUR? OR DETERMIN?)
L48 316 S L46 (P) (ASSAY OR MEASUR?)
L49 60 S L46 (P) ASSAY
L50 27 DUP REM L49 (33 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 22:12:42 ON 19 MAY 2000

FILE 'STNGUIDE' ENTERED AT 22:15:31 ON 19 MAY 2000

FILE 'MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL' ENTERED AT 22:17:02 ON 19 MAY 2000
L51 141 S L10 AND (WELL (2A) PLATE)
L52 61 S L10 AND ((WELL (2A) PLATE) (P) (DERIV? OR COAT? OR MODIF?))
L53 13 S L52 NOT (BIOTIN? OR STREPTAVIDIN)

FILE 'STNGUIDE' ENTERED AT 22:21:49 ON 19 MAY 2000

ACCESSION NUMBER: 2000:53876 USPATFULL
TITLE: Cellular transport detection method
INVENTOR(S): Kauvar, Lawrence M., San Francisco, CA, United States
PATENT ASSIGNEE(S): Trellis Bioinformatics, Inc., San Francisco, CA,
United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6057092	20000502
APPLICATION INFO.:	US 1998-144609	19980831 (9)
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Saucier, Sandra E.	
ASSISTANT EXAMINER:	Afremova, Vera	
LEGAL REPRESENTATIVE:	Morrison & Foerster LLP	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
LINE COUNT:	454	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM Applications of scintillation counting incorporated into specifically designed assays have been termed "**scintillation proximity assays**." These depend on the necessity for the scintillant to be within a certain distance of a beta emitting radioactive isotope in order to emit light; the mean radiation distance of the beta emitter determines the distance required for the scintillant

to emit detectable light. By associating the scintillant with a reagent to be tested against a labeled substance, the interaction of the substance with reagent can be assessed. Either the analyte bears a beta emitting radioisotope, or is placed in competition with a labeled form or analog of the analyte for the reagent associated with scintillant. Such assays are described generally in U.S. Pat. Nos. 4,382,074; 4,568,649; and 4,687,636. A typical approach involves a homogeneous immunoassay system wherein a scintillant is embedded in a particulate bead which is conjugated to an antibody. Substances immunoreactive with the antibody can be measured by competition with a radioactively labeled form of the substance or its analog for the antibody coupled to the beads; the level of light emitted by the scintillant is thus inversely proportional to the analyte in the sample.

SUMM U.S. Pat. No. 5,665,562, incorporated herein by reference, describes a scintillation based system for monitoring uptake of radioactively labeled substrates by cellular monolayers. In this macroscopic method,

a

modified form of a 96-well microtiter plate is employed, whereby a region of the base portion of the wells is constructed of polystyrene containing a scintillant, such as 2-(4-t-butylphenyl)-5-(4-biphenyl)-1,3,4-oxadiazole (2%) and 9,10-diphenylanthracene (0.5%). The plate is constructed so as to minimize or eliminate the passage of light from well to well. A monolayer of cells is **coated** in each well and the uptake of a radioactively labeled substrate is measured by the emission of light by the scintillant.

SUMM Applying **scintillation proximity assays** to a microscopic format using appropriately small amounts of sample tissue or cells and correspondingly small amounts of test compounds and other reagents permits real time observation of transport of compounds across cellular membranes and of the effect of potential enhancers or